Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-41 (Canceled)

42. (NEW) An antibody that specifically binds to Factor D, or a Factor D binding fragment thereof, which completely inhibits complement activation at a molar ratio of about 1.5:1 (antibody to Factor D).

43. (NEW) The antibody or binding fragment of claim 42, wherein the inhibition of complement activation is determined *in vitro*.

44. (NEW) The antibody or binding fragment of claim 42, wherein the inhibition of complement activation is determined *ex vivo*.

45. (NEW) An antibody or binding fragment thereof, that binds to a region of human factor D from amino acid residue Cys154 to Cys170 (inclusive) and completely inhibits complement activation at a molar ratio of about 1.5:1 (antibody to Factor D).

46. (NEW) The antibody or binding fragment of claim 45, wherein the antibody or fragment does not bind to human factor D if amino acid residues Arg156, His159 and Leu168 are absent.

47. (NEW) The antibody fragment of claim 42, wherein the fragment is Fab, $F(ab')_2$, Fv or single chain Fv.

48. (NEW) The antibody or binding fragment of claim 42, wherein the antibody is a chimeric, humanized, deimmunised or human antibody.

49. (NEW) The monoclonal antibody 166-32.

50. (NEW) The hybridoma producing the monoclonal antibody 166-32 of claim 49, deposited at the American Type Culture Collection under Accession number HB-12476.

51. (NEW) An antibody or binding fragment thereof, that binds to the same epitope on factor D as the antibody 166-32 and which completely inhibits complement activation at a molar ratio of about 1.5:1 (antibody to factor D).

52. (NEW) The antibody fragment of claim 51, wherein the fragment is Fab, $F(ab')_2$, Fv or single chain Fv.

53. (NEW) The antibody of claim 51, wherein the antibody is a chimeric, humanized, deimmunised or human.

54. (NEW) A cell line producing the antibody or binding fragment of claim 51.

55. (NEW) A cell line producing the chimeric Fab fragment of claim 52.

56. (NEW) The chimeric form of the antibody of claim 51, having a mouse variable region of the monoclonal antibody 166-32 and a human constant region.

57. (NEW) The chimeric form of the antibody of claim 51, having a mouse variable region and a human constant region, of the Fab fragment of the monoclonal antibody 166-32.

58. (NEW) A method of ameliorating a disease or condition mediated by excessive or uncontrolled activation of the complement system comprising administering an effective amount of the antibody according to claim 42 to inhibit the excessive or uncontrolled activation of the complement system.

59. (NEW) The method according to claim 58, wherein the antibody is administered to a patient undergoing an operation involving cardiopulmonary bypass.

60. (NEW) The method according to claim 59, wherein the antibody or binding fragment thereof is administered *in vivo.*

61. (NEW) The method according to claim 59, wherein the antibody or binding fragment thereof is administered *ex vivo.*